

Remarks

Reconsideration of this Application is respectfully requested.

Support for the amendment to claim 69 can be found, *inter alia*, at page 22, lines 15-26. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 112

Claims 69 and 70 were rejected under 35 U.S.C. § 112, first paragraph, for alleged lack of written description. Applicants respectfully traverse this rejection.

The Office Action stated that

[r]egarding the specification, pages 22 and 24, said pages disclose partially conjugated polylysine and polylysine/transferrin conjugate, but do not disclose the scope of the claimed invention (eg. partially conjugated polycation, wherein the polycation is not polylysine and polycation/transferring conjugate, wherein the polycation is not polylysine).

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Applicants have amended claim 69, from which claim 70 depends, to recite that the polycation is polylysine conjugated with another protein. Support for this amendment can be found, for example, on page 22, lines 15-36. Applicants believe that this amendment overcomes the rejection. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 69 and 70 were rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. Applicants have amended the claims to remove the offending term. Thus, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 36, 38-40, 42-44, 48-50, 69 and 70 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Nair *et al.*, *J. Immunol. Methods* 152I:237-243 (1992); in view of Fearon *et al.*, *Cancer Res.* 48:2975-2980 (1988); Townsend *et al.*, *Cell* 39:13-25 (1984); Van Der Bruggen *et al.*, International Appl. Publ. No. WO95/00159; and prior art disclosed in the specification. Applicants respectfully traverse this rejection.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, the Examiner must show that the prior art suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process, and that the invention could be attained with a reasonable expectation of success. See *In re Vaeck*, 20 U.S.P.Q2nd (BNA)1438, 1442 (Fed. Cir. 1991). Any suggestion and reasonable expectation of success must come from the prior art of record, not Applicants' disclosure. *Id.*

The Office Action stated that

[i]t would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because Nair et al disclose use of an organic polycation (eg. cationic liposomes containing polylysine) to deliver an MHC class I antigen to tumor cells, Fearon et al. teach a tumor vaccine wherein tumor cells are transfected with the gene encoding HA while Van Der Bruggen et al. teach MHC class I restricted tumor antigens and that such antigens can be used to provoke CTL in vivo.

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The claims require that the tumor cells have been incubated in the presence of a particular organic polycation and at least one type of peptide which binds the peptide binding fork of an MHC class I molecule. None of the references relied upon for this rejection teach or suggests these limitations of the claims.

Nair teaches cells incubated in the presence of a cationic liposome and full-length ovalbumin protein. Full-length ovalbumin protein is too large to fit into the binding fork of an MHC class I molecule. Thus, Nair does not teach nor suggest all the limitations of the claims.

Neither Fearon nor Townsend cure the deficiencies of Nair. Both Fearon and Townsend teach cells transfected with DNA encoding the full length hemagglutination antigen. Neither Fearon nor Townsend teach nor suggest modifying Nair to deliver MHC-binding peptides. Fearon and Townsend do not even teach or suggest transfecting a DNA encoding an MHC-binding peptide. Van der Bruggen is directed to the identification of a particular melanoma-associated protein which is a target for cytotoxic T cells. Nothing in van der Bruggen teaches or suggests administering a MHC-binding peptide with an organic polycation to tumor cells.

The Examiner has not pointed out the motivation to combine the numerous references relied upon in making this rejection to arrive at the presently claimed invention. Thus, a *prima facie* case of obviousness has not been established. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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